Second wheat choices merit thought

With up to a quarter of the UK wheat crop drilled after wheat, *Andrew Blake* asks cereals specialists how the second crops' performance can be improved

good second wheat variety must fulfil two key requirements, believes independent consultant Mike Jeffes.

In well-run comparative trials, it should shed little yield between the first and second sowing slots. "But it must also have an inherently high yield as a second wheat," he stresses. "The latter is obvious from a gross margin viewpoint, while the former suggests reliability over sites and seasons, helping counter complaints that 'it was a poor second wheat variety/year'."

Comparative data are available from the HGCA, he adds. "But more trials are needed."

Good high-yielding second wheat examples are Battalion, Duxford, Grafton and JB Diego. Although Oakley in absolute yield terms seems to offer good gross margin potential as a second wheat, its output drop between first and second sowings is similar to that of Alchemy, Robigus and Viscount, says Mr Jeffes.

"That's not to say that growing Oakley or Viscount as a second wheat is wrong or will result in financial disaster. It's just that growers might expect more variable performance from these varieties as second wheats over sites and seasons."

The range between the best and worst varieties in terms of first versus second wheat performance is 0.3-1.4t/ha – nearly a fivefold difference. But poor second wheat performance is not solely explained by eyespot resistance or take-all, he notes.

"Panorama has a poor eyespot score of 4 compared with Scout at 9, but both show a similar yield drop when grown as second wheats. However, eyespot is undoubtedly more of a problem in second wheats, so I prefer to see high rather than low scores for this characteristic."

Second wheats are normally sown later than firsts, so there is less time to tiller before temperatures drop, hence the advice to increase seed rates as drilling gets later.

"But it could be argued that wheats which are slow to develop in spring, and so have more time to develop tillers before going reproductive, could compensate better



Second wheats can perform well, but care is needed with variety choice and subsequent agronomy.

for lower ear numbers than varieties which move to GS 31 more quickly. This theory works with Duxford, Diego and Deben, but doesn't with Claire, Alchemy or Battalion. But, as with eyespot resistance, it's something worth considering."

Inherently high specific weight undoubtedly helps counter potential quality penalties in second wheats, he adds. "They generally have lower specific weights than first wheats, so you have more in hand before penalties kick in."

So should growers be more care-

ful when choosing second wheats? "Within reason, yes," he replies. "But some 'good' second wheats – for example, Battalion – are relatively poor yielders as first wheats; and some growers might not want too much of a spread of varieties for storage, overall management and/or marketing reasons.

"So if someone wanted to drill Oakley after Oakley to keep their system simple, I wouldn't get too upset, although I'd rather they grew Grafton or Duxford, which should reliably give them a better second slot yield. I'd like to see more overall planning on how second wheats fit into the rotation, and how they might affect storage, management and marketing – it's complicated, but certainly not impossible."

Rothamsted WGIN work suggest-

Rothamsted WGIN work suggesting that some first wheat varieties generate more take-all than others in following wheats, whatever the variety, also needs bearing in mind, says Mr Jeffes.

HGCA information on variety choice is only the start, he advises. Interpretive discussions with consultants and agronomists, in the context of overall farm management and gross margins, should help finetune decisions.

"Listening to other farmers is also quite useful to get some measure of second wheat variety performance. Then think about agronomic aspects. The sowing date, being generally later, means using a higher seed rate, so stiff straw will probably be advantageous. And consider using seed treatments and more early nitrogen to ensure tiller survival." crops@rbi.co.uk →p13

SEED TREATMENT

■ Jockey (fluquinconazole + prochloraz) and Latitude (silthiofam) both help reduce the effects of take-all, notes Mr Jeffes.

"It's probably fair to say that silthiofam can show a slight yield advantage over fluquinconazole. But when margin over treatment cost is taken into account, this yield difference becomes less valuable."

Wheat price and seed rate clearly affect their cost-effectiveness, he adds. "Both products allow growers to drill second wheats up to 10 days earlier than they might otherwise do, because they stop the fungus invading the roots during early establishment.

"Earlier drilling can help with management and may lead to better establishment."